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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/429,470	10/28/1999	HONG HEATHER YU	9432-000089	5971

7590

12/06/2005

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EXAMINER

CALLAHAN, PAUL E

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/429,470

Applicant(s)

YU, HONG HEATHER

Examiner

Paul Callahan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-11, 14, 15, 20-22 and 24-28 is/are allowed.
- 6) ☐ Claim(s) 1, 3-6, 12, 13, 16-19, 23 and 29-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, and 3-33 were pending in this application at the time of the previous Office Action. The claims are now pending, and have been examined.

Response to Arguments

2. Applicant's arguments filed 9-6-2005 have been fully considered but are moot in light of the new grounds of rejection detailed infra.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-6, 12, 13, 16, 19, 23, and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Powell et al. US 6,678,392 B2 and Miyabe et al. US 5,606,628.

As per claim 1, Powell teaches a computerized method (col. 3 lines 7-10) for authenticating an electronic file (abstract) comprising the steps of: receiving an electronic file and creating an object level representation of the graphical content (col. 2

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lines 48-67), and adding authentication information to the electronic file based on the object level representation of the graphical content (col. 2 lines 48-67). Powell teaches the graphical content as grey scale images, but not as explicitly having one bit per values. Miyabe does teach this (fig. 11, step. s4). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated this feature into the system of Powell. it would have been desirable to do so as it would allow the use of bit-mapping techniques as applied to data hiding with little human perceptibility in a graph.

As per claim 3, Powell teaches converting the graphical content into a symbolic representation of the graphical content (col. 2 lines 48-67).

As per claim 4, Powell teaches defining nodes of the graphical content with specification symbols (col. 2 lines 48-56).

As per claim 5, Powell teaches defining the shape, size, color, and position of the nodes in (col. 2 lines 48-67).

As per claim 6, Powell teaches defining conditions and familial relationships between the nodes. (col. 6 lines 45-65, col. 3 lines 30-35, col. 2 lines 48-67).

As per claim 12, Powell teaches the step of authenticating the graphical content at the pixel level (col. 7 lines 35-50).

As per claims 13, 16, 19, and 23, Powell teaches the step of adding visible and or invisible authentication information to the graphical content (col. 2 lines 47-67).

As per claims 29-33, these claims represent the apparatus carrying out the method of claims 1 and 18 and are therefore rejected on the same basis as those claims.

5. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Powell and Miyabe, Cullen et al. (US 5,335,290), and John Clarkson, "Converting Excel 97 Data to HTML," Microsoft Excel 97 Technical Articles, Microsoft Corp. July 1998, pages 1-3.

As per claim 17, the combination of Powell and Miyabe do not explicitly teach partitioning an electronic file into graphical content and textual content. However Cullen does teach this step. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this step into the system of Powell and Miyabe. The motivation to combine the teachings for these two references is found in Powell col. 1: lines 34-40 where he discusses the need for image authors to audit the usage of their works when published as parts of electronic documents.

As per claim 18, Powell teaches authentication of an image at a pixel level and an object level (col. 7 lines 1-16). However, the combination of Powell and Miyabe does not explicitly teach transmitting the authenticated image or that the image is a binary graph. However, Clarkson, "Converting Excel 97 Data to HTML," Microsoft Excel 97 Technical Articles, Microsoft Corp. July 1998, does teach the step of transmitting a document or image on page 1 under the section "The Internet Assistant Wizard Add-In" the function of the Add-In is described as "creating a web page from worksheet data or a chart" and page 2 under the section "Syntax, Table 1. HTMLconvert Named Arguments" the argument EmailFullPage is defined, which clearly indicates Excel 97's capability to email a chart to a recipient. The terms chart and graph are used synonymously in the art. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate these features of Clarkson into the method of Powell. It would have been advantageous to do so as transmission of documents such as graphs and charts implies utilization of the Internet for commercial sale of this data, and utilization of the authentication method of Powell to authenticate binary graph data would increase the security and hence marketability of the data. The combination of Powell, Cullen, and Clarkson does not teach encrypting the graph prior to transmission. However, Official Notice may be taken that the encryption of graphs and graphed data prior to transmission is old and well known in the art. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Powell and Clarkson. It would have been

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desirable to do so as this would increase the utility of the system by allowing for the encryption of data in this additional format.

Allowable Subject Matter

6. Claims 7-11, 14, 15, 20-22, and 24-28 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

As per claim group 7-11, and 26, the prior art does not teach the limitations of claim 1 and sequential authentication of an object level representation by a textual authentication algorithm, as the Examiner understands the Applicant's use of the terms.

As per claims 14 and 15, the prior art does not teach the limitations of claim 1 and where the visible authentication data is a bounding box or a bar code.

As per claims 20-22, 24, 25, 27, and 28, the prior art does not teach the limitations of claims 19 and 23, and further operating on a truncated image in the manner of the applicant as found in claims 20 and 24.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

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If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Emmanuel Moise, can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is: (571) 273-8300.

11/28/05

Paul Cullen

Emmanuel L. Moise
EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER